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DEMOCRATIC REPUBLIC OF AFGHANISTAN

SUMMARY OF NATIONAL PAPER*

Introduction

The Democratic Republic of Afghanistan is a land-locked country located in Central Asia. The population, estimated at 17 million in 1975, is to a large extent rural and lives off agriculture and animal husbandry. The illiteracy rate is estimated at 88 per cent. While reserves of natural resources are still not fully gauged, deposits of coal, iron ore, copper and natural gas are known to exist in the country. Modern industry contributes only 6 per cent of the national product.

For the preparation of the National Paper for the 1979 United Nations Conference on Science and Technology for Development, a multidisciplinary approach was sought to be adopted through interaction among several Ministries, with the Ministry of Mines and Industries acting as Co-ordinator. An attempt was made to identify policies of the Government; and various subject areas were selected and studied in the context of these policies. While discussing these subject areas, representatives of various Ministries sought for areas of commonality in science and technology for solution of development problems. These subject areas are described below:

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* The designations employed, the presentation of material and the views expressed in this paper are those of the Government of Afghanistan and do not necessarily reflect the practices and views of the Secretariat of the United Nations in any of these respects.

Science and Technology for Development

The Democratic Republic of Afghanistan is deeply interested in appropriate utilization of modern technology for meeting the development objectives. For this purpose it is felt that a central agency to oversee science and technology should be established in the country. This agency is expected to establish horizontal domestic linkages between various Ministries to determine the type of technology needs of each Ministry in support of development needs. Besides this, research organizations are badly needed particularly in the areas of agriculture, irrigation, public health and engineering. It might also be appropriate for international agencies to conduct regional educational research programmes.

In the area of agriculture, technology has to be improved and agriculture in the country modernized. Better tenancy laws, crop rotation, dry land farming, proper education of farmers for scientific farming are considered necessary. It is also considered necessary to modernize animal husbandry, save forest resources from depletion and obtain optimum use of water resources.

Programmes to assess and develop the country's energy and natural resources have to be expanded. Shortage of modern surveying equipment and lack of effective training of Afghan geologists and mining engineers has to be overcome. An attempt is being made to make full use of the country's natural resources, increase industrial production capacity, encourage small and medium-scale industries and improve the working of industries through scientific planning, proper repairs and maintenance of machinery and industrial research.

In the field of education, expansion of free intermediate, high and vocational education, in order to train academic and professional cadres required for economic progress of the country and review of curricula of schools and of institutions of higher learning are considered essential. Promotion of science education and popularization of science are also considered important. The emigration of competent and qualified scientific and technical manpower to the developed world and oil-producing countries is a serious impediment to Afghanistan's development and we have to formulate a strategy to deal with this problem.

In the area of public and environmental health, ensuring of health services and bringing an end to anti-social merchandising in health affairs, campaigns against various diseases and expansion of preventive and curative medicines will be the major objectives of the Democratic Republic of Afghanistan. The domestic transport system in the country is in an early stage of development and poses a serious problem due to difficult topographical conditions. The land-locked nature of the country with long and difficult connexions with the seaports causes additional costs and reduces the country's competitive position in foreign markets. It will be the object of the country to devote attention to the solution of these problems.

With a view to integrating science and technology in economic and social development, a central science and technology agency will be set up. A National Seminar on Science and Technology for Development will be organized to formulate national policies. Science and technology will be popularized among the masses

through strengthening current high school science education and extracurricular activities of students to generate their interest in science and technology.

In order to overcome obstacles in development new science and technology will be used. New methods such as the utilization of air photos and data collection by remote sensing techniques are good examples.

Institutional arrangements and new forms of international co-operation in application of science and technology

Afghanistan has to go a long way in the building up and expansion of institutional systems for science and technology. The libraries and the information systems have to be strengthened to enable exchange of scientific and technological information and experiences significant to development. Another mechanism for better exchange of information is attendance at international conferences. Young scientists and technologists may be allowed to widen their knowledge. International co-operation in the field of science and technology is important, particularly in the field of training. International funding for scientific and technological research institutions in developing countries is also inadequate at present. There are several developing countries that passed only recently through the same stage of development as Afghanistan is passing through now. Therefore, their co-operation and support for Afghanistan's development programmes are bound to be very relevant and appropriate. Finally, for a land-locked country like Afghanistan that is heavily dependent upon neighbouring countries for access routes overland to markets and seaports, co-operation of these neighbouring countries is considered vital to its development.

Utilization of the existing United Nations system and other international organizations

It is felt that the United Nations system, while providing assistance in discreet areas mentioned above, should also help strengthen the over-all science and technology organization in the country, help improve the quality of science and technology manpower needed in different subject areas and help in building indigenous research capability. Further, the United Nations system itself may articulate the science and technology policy for the world and different countries so that the type of technology that is introduced under the United Nations projects is consistent with such a policy.